EXECUTIVE SUMMARY

- Young Minos issues:

    – Retiring most AFS data areas, due to old hardware – in progress

    – Repeated Bluearc overloads by new small experiments

    – Requested 50 TB Bluearc and Open Hardware cache

- SLF5 migration is complete – still have minos-slf4 very short term

- No major planned outages

- Retiring DBMAuto

- Migrating JIRA to Redmine

- Control Room - System Management is by FEF/SWS - CD DocDB 4430

GRID

- CPN - 11.9 million locks served to Minos (3. M NovA, 11 M MNV)

- Still preparing to use shared jobsub scripts – being improved

  - /grid/fermiapp/common/condor

  - Will give us access to about 100 GPCF batch slots

  - Supports ftp copies, DAG, etc.

- Should start using the Bluearc GridFTP server for MC import.

  - UT Austin tested this – should start using for mcimport

- Local shared file support - no progress

  - OSG_WN_TMP was converted to per-job temporary areas, as originally planned

  - /local/stage1 restored on GPFarm nodes, discussing long term solutions

DATA handling

- SAM Projects have been run this year only to test the SAM Station.

  - Prototype lightweight script to delivers files like a SAM Project.

  - No progress lately, but very little work needed

- Preparing to move SAM servers from minos-sam04 to ifsamgpvm01

  - Should be transparent to us

- The bluearc firmware upgrade scheduled May 17 went without incident.

- Frequent Bluearc overloads due to new small users making mistakes

  - chmod -R on 200K files by grid jobs

  - writing 50 GB/job – timed out locks are ignored, snowball effect

    - can fix cpn to keep lock while cp is running

Enstore/DCache

- DCache 'Chimera' database migration April 19

    - This was completed as scheduled, little impact on us.

- Open Hardware disk requested next year

    - Deployed cost under $100/TB

    - Commercial systems good for Dcache, Enstore, SAM and for Bluearc backend migration.

    - Deployed at Petabyte scale by Backblaze and others

    - https://cdcvs.fnal.gov/redmine/projects/minos/wiki/DATAPLANOPEN

- NFS 4.1

    - DCache direct file access, as soon as we have clients (SLF 6.3 ?)

    - ACL's in Bluearc, with a future Bluearc firmware release

- ENSTORE SFA (Small File Aggregation) is deployed

    - We should use this to archive mcin_data and stage

REX/ELC

- The REX supported jobsub script is under development

  - We should start testing it for compatibility

- IF Beam monitoring deployed for NovA era beam monitoring

  - We need to compare this to our beam data logging

  - Volunteers/conscripts are needed for this task

  - http://dbweb3.fnal.gov:8080/ifbeam/app/Dash/index

- NUCOMP meetings are no longer being held

  - Lee Lueking retired earlier this year

  - Rick Snider is heading a new Experiment Liaison Committee

  - https://sharepoint.fnal.gov/org/scd/elc/SitePages/Home.aspx

FERMIMAIL / DATABASE

- The migration to Exchange 2010 is complete, no major remaining issues.

- Fermilab Virus/Spam filtering was modified Aug 23.

    - You may wish to filter on spam headers.

    - http://computing.fnal.gov/xms/Services/Getting_Services/FermiMail/Spam_and_Anti-virus_Protection

- We are retiring DBMAuto

    - There are no remaining clients of the Master.

    - Used only to move a few tables from Soudan to Fermilab.

    - Soudan could write directly to Fermilab

        - Alec Habig is evaluating this

        - Soudan should not lose data when the network is down.

GPCF

- Has moved to FCC, for more stable power

- Running XEN instead of former OracleVM

- minos-slf4 = minosgpvm02 runs SLF 4.7 32 bit kernel

    - Nobody had threatened to turn it off yet.

    - 'Just In Case' we need to test SLF 4 compability

Minos Servers

- Moved to new IF production server (ifdb03) on Jul 19

    - The old minos-mysql2 disks were failing

    - We access this as minos-db1, as always

    - Will move to another new server soon, with improved disks for other users

        - this should be transparent, perhaps a short downtime

- Retirement of DBMAUTO

    - We have no remote clients doing physics

    - Will find alternate method to move data from Soudan to FNAL, or use the master database directly

- SLF5 migration

    - minos25 (condor master) is now a VM.

        - restructured users' kproxy cron jobs for performance

            - kinit was getting stuck in a loop
            - too many kcrons were running at once

Control Room / DAQ

- System Management

    - FEF/SWS is managing CR systems. John Urish has retired.

    - New workstations have arrived, will be installed soon

    - Will move to newly installed hosts one at a time

- AFS

    - Will make a local copy of what is needed in CR, and stop using AFS

- FPCONSOLE

    - The system labeled minos-dcs will move underground

    - Access the screen via VNC (rdesktop)

    - Remove the DAQ/DCS network from WH12 for security

- JIRA migration to Redmine

    - Will ask SCD/REX (Mengel) to do the migration

    - JIRA is supported only by Alec Habig

    - Redmine is well supported, widely used, locally served, open source